

Appln. No.: 10/085,910
Amendment (Corrected) dated November 20, 2006
Reply to Office Action of June 21, 2006

REMARKS/ARGUMENTS

The Office Action of June 21, 2006, has been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of the application are respectfully requested.

Rejections Under 35 U.S.C. § 112

Claims 1, 9, 16, 21 and 36 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicants have amended claims 1, 9, 16, 21 and 36, rendering the rejection moot.

Rejections Under 35 U.S.C. § 103

Claims 1 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jonsson (U.S. Pat. No. 5,513,246) in view of Chen (U.S. Pat. No. 6,731,936).

Claims 24, 26, 28, 29, 31, 33, 41, and 42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jonsson in view of Chen, and further in view of Malek (U.S. Pat. No. 5,822,313).

Claims 3-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jonsson in view of Chen and Malek, and further in view of Ahopelto (U.S. Pat. No. 5,970,059).

Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jonsson in view of Chen, and further in view of Nguyen (U.S. Pat. No. 5,359,607).

Claims 25, 34, and 35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jonsson in view of Chen and Malek, and further in view of Nguyen.

Claims 21, 23, and 36-38 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Nguyen, Chen, and Malek.

Claim 22 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Nguyen, Chen, and Malek, and further in view of Taketsugu (U.S. Pat. No. 5,420,863).

Claim 9, 11-14, 16, 18, and 39 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Chen, and further in view of Makinen (U.S. Pat. No. 5,764,700).

Claims 10 and 19-20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Jonsson in view of Chen and Makinen, and further in view of Nguyen.

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Claim 17 stands rejected under 35 U.S.C. §103(a) as unpatentable over Jonsson in view of Chen and Makinen, and further in view of Doshi (U.S. Pat. No. 5,936,965).

Claim 32 stands rejected under 35 U.S.C. §103(a) as unpatentable over Jonsson in view of Chen and Malek, and further in view of Doshi.

Claims 40 and 44 stand rejected under 35 U.S.C. §103(a) as unpatentable over Jonsson in view of Chen and Makinen, and further in view of Malek.

Claim 15 stands rejected under 35 U.S.C. §103(a) as unpatentable over Jonsson in view of Chen and Makinen, and further in view of Lim (U.S. Pat. No. 6,766,168).

Claim 30 stands rejected under 35 U.S.C. §103(a) as unpatentable over Jonsson in view of Chen and Malek, and further in view of Lim.

These rejections are traversed for at least the following reasons. Applicants have amended various claims to more clearly indicate that the mobile terminal performs handover operations, as opposed to handover occurring at the direction of other nodes or devices.

Jonsson describes slots in cellular mobile radiotelephone system. The handoff in Jonsson is controlled by a mobile services center and necessitates a two-way communication between the mobile station and the base station. This is clearly disclosed in Jonsson column 10, lines 11-15 and 19-28. Jonsson states that if the present cell is not the best cell, the mobile services center then tries to allocate a channel in each of the better cells in turn in order of their ranking until either the allocation is successful or the present cell is the next-best cell according to its ranking (S19). If a channel is successfully allocated in Jonsson, a handover to the corresponding cell is then attempted (S25). The present base station waits to learn the results of the handover attempt, and if the handover was successful (S29), relinquishes communications with the mobile station in favor of its successor base station. If the handover was unsuccessful (S31), the base station resumes communication with the mobile station over the same channel as was used previously. The locating routine then returns to wait for the next appropriate evaluation time. This is not the same as the claimed handover, where the mobile terminal performs the handover operations.

In addition, the receiver of Jonsson is not a digital broadcast receiver for receiving digital video broadcasting information, as recited, for example, in claim 9. Jonsson, instead, describes

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only conventional cellular phone technology, with no mention of using its system with digital video broadcasting.

The Chen reference also does not perform as claimed, and instead describes broadcasting TV broadcasts where receivers use either a 'soft handoff' (col 6, lines 40-45); a 'softer handoff' (col 6, lines 46-51), which both include a reverse link communication, or a 'hard handoff.' According to Chen (col 7, lines 65-68) a hard handoff means 'that monitoring of a first channel is discontinued before monitoring of the second channel begins ("break before make").'

For a 'hard handoff' the subscriber station may receive an HSBS neighbor configuration indicator (NGHBR_CONFIG_HSBS) transmitted by the current sector (col. 13, lines 46-50). This indicator indicates whether a HSBS configuration of the neighbor sector is known, whether the neighbor sector is transmitting the F-BSCH, whether the F-BSCH of the neighbor sector is being transmitted on the same frequency, whether the HSBS channels are synchronized, whether the same set of HSBS channels are being multiplexed in the same manner into the F-BSCH being transmitted in the neighbor sector, whether autonomous soft-handoff is allowed, and other configuration information then known to one skilled in the art (col 13, lines 51-60).

In Chen, if the subscriber station failed to acquire all necessary parameters from the NGHBR_CONFIG_HSBS indicator, the subscriber station performs a hard handoff to the second sector, acquires a frequency and a paging channel from the second sector using a hashing method in accordance with the neighbor information, determines information about the HSBS channel from the Broadcast Service Parameters Message, tunes to the HSBS channel frequency, and resumes receiving the HSBS channel (col 14, line 63-col 15, line 5). Thus, when performing the handoff according to Chen, either NGHBR_CONFIG_HSBS is needed or the subscriber station has received from 'a channel provided by the system for overhead messages identified in the Sync channel message, and if a sector, which the subscriber station acquired, supports multiple frequencies, both the subscriber station and the sector use a hash function to determine which frequency to use for communication. The subscriber and sector then use the hash function to determine a paging channel, which the subscriber monitors (col 13, lines 15-22).

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Chen thus does not teach or suggest a handoff from a first digital video broadcasting signal to a second digital video broadcasting signal performed by the mobile terminal as claimed, but rather uses different data and/or a different indicator, as discussed above.

Because none of the other cited references in any of the rejections cure this deficiency, claims 1, 9, 16, 21, and 36, and all claims dependent therefrom, are allowable over the respectively cited references at least for the aforementioned reason.

Independent claims 24 recites "to switch reception by the digital broadcast receiver from the first digital video broadcasting wireless transmitter to a second digital video broadcasting wireless transmitter of the plurality of wireless transmitters after reception of said first transmission burst has been completed and before a consecutive transmission burst is sent by the synchronized first and second digital video broadcasting wireless transmitters."

Independent claims 31 recites "to perform a hand-over from said first digital video broadcasting transmitter to said second digital video broadcasting transmitter upon receipt of a first transmission burst, prior to a consecutive transmission burst."

The Office Action suggests Malek describes such a feature at col. 6, lines 31-35, which read:

"base station's area to another. In the past, a handover from one base station to another simply caused the handset to cease transmitting and receiving via the old base station, and on the next frame, begin transmitting and receiving via the new base station. A low signal strength (RSSI), CRC errors,

However, contrary to the Office Action's assertion, this does not amount to switching reception *before or prior to* a subsequent transmission burst, as claimed. Thus, claims 24 and 31, and all claims dependent therefrom, are also allowable over the respectively cited references.

Irrespective of the above, Applicants also submit that there is no expectation of success in the combination of Jonsson and Chen. Namely, Jonsson describes a system for two-way radio telephones, whereas Chen describes a broadcast (i.e., one-way) communication system. While the Office Action alleges that Chen describes a two-way system, the two-way aspect of Chen referred to by the Office Action is with respect to signaling only. One of skill in the art will appreciate that the technologies of Chen and Jonsson differ vastly, and use different transmission

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schemes. One does not inherently work with the other, and thus one of ordinary skill in the art would not expect the combination of one to work with the other. Furthermore, the Office Action's alleged motivation, "for maintaining the data quality in a mobile multimedia device," lacks merit. First, there is no mention in either reference that data quality in multimedia devices is lacking or in need of the solution provided by the other reference. Second, the alleged motivation is the result of the combination having been made in the first place, and is thus improper hindsight. While the Office Action indicates that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, the Office Action provides no evidence that the combination takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, nor does the Office Action provide any evidence that the combination does not include knowledge gleaned only from Applicant's disclosure. Applicants therefore maintain that the combination of Chen and Jonsson is improper.

Given the number of references combined in many of the rejections, Applicants reserve the right to attack the combinations of other references as well. Applicants do not do so at this time because Applicants believe that prosecution is most expeditiously advanced, in view of the third non-final Office Action, by the above arguments.

CONCLUSION

All rejections having been addressed, Applicants respectfully submit that the instant application is in condition for allowance, and respectfully solicit prompt notification of the same. However, if for any reason the examiner believes the application is not in condition for allowance or there are any questions, the examiner is requested to contact the undersigned at (202) 824-3153.

Respectfully submitted,

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Dated this 20th day of Nov., 2006

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